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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,957	01/29/2004	Masahide Sato	P04688-US	2331
21254	7590	04/01/2005	EXAMINER	
MCGINN & GIBB, PLLC 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA, VA 22182-3817			NGUYEN, HOANG V	
			ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 04/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/765,957

Applicant(s)

SATO ET AL.

Examiner

Hoang V. Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-9, 11 and 12 is/are rejected.
- 7) ☒ Claim(s) 6, 10, 13 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/20/04 & 7/7/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitation "said three-dimensional configuration" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim. Examiner cannot determine applicant refers to the three-dimensional configuration of the **first** antenna element or the three-dimensional configuration of the **second** antenna element. Claims 3-5 are rejected for the same reason. Clarification/correction required.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 7-9 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Rannou et al (US 3,942,180).

Regarding claim 1, Rannou (Figure 1, col 1 lines 47-64) discloses an antenna device comprising a base member 7 composed of a dielectric material and which has a peripheral

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surface and a plain surface; a first antenna element 2 having a three-dimensional configuration and formed on the peripheral surface of the base; a second antenna element 1 having a three-dimensional configuration and formed on the peripheral surface of the base member with a predetermined distance being kept from the first antenna element.

Regarding claims 2 and 3, as applied to claim 1, Figure 1 of Rannou shows that the three-dimensional configuration of the first antenna element and the second antenna element is a circular cone-shaped configuration or a pyramid-shaped configuration.

Regarding claim 7, as applied to claim 1, Figure 1 of Rannou shows that the first antenna element 2 is formed on an inner peripheral surface of the base member 7.

Regarding claim 8, as applied to claim 1, Figure 1 of Rannou shows that the second antenna element 1 is formed on an inner peripheral surface of the base member 7.

Regarding claim 9, as applied to claim 1, Figure 1 of Rannou shows that the first antenna element 2 and the second antenna element 1 are formed with respective rotation central axes thereof being corresponding with each other.

Regarding claim 11, as applied to claim 1, Figure 1 of Rannou shows that a signal from a signal source is supplied to the first antenna element (via inner conductor 4 of a coaxial cable) while a ground voltage is supplied to the second antenna element (via outer conductor 3 of a coaxial cable).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rannou.

Rannou discloses an antenna device comprising a base member composed of a dielectric material and which has a peripheral surface and a plain surface; a first antenna element having a three-dimensional configuration and formed on the peripheral surface of the base; a second antenna element having a three-dimensional configuration and formed on the peripheral surface of the base member with a predetermined distance being kept from the first antenna element, wherein a signal from a signal source is supplied to the first antenna element while a ground voltage is supplied to the second antenna element. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a signal from a signal source to the second antenna element while a ground voltage is supplied to the first antenna element, since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. *In re Einstein*, 8 USPQ 167.

#### ***Allowable Subject Matter***

7. Claims 6, 10, 13 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 6, Rannou fails to further teach, among other features, that the two-dimensional configuration is a plane-shaped configuration.

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Regarding claims 10, 13 and 14, Rannou fails to further teach, among other features, a third antenna element formed on the base member with a predetermined distance being kept with respect to the first and second antenna elements.

*Correspondence*

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang V. Nguyen whose telephone number is (571) 272-1825. The examiner can normally be reached on Mondays-Fridays from 9:00 a.m. to 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoang Nguyen can be reached on (571) 272-1825. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hvn  
3/28/05



HOANG V. NGUYEN  
PRIMARY EXAMINER